

DOCKET NO.: H0498.70112US01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Charles M. Lieber, et al.

Serial No.:

10/812,653

Confirmation No.:

3416

Filed:

March 29, 2004

For:

NANOSCOPIC WIRE-BASED DEVICES AND ARRAYS

Examiner:

Howard Weiss

Art Unit:

2814

Certificate of Mailing Under 37 CFR 1.8(a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service on the date shown below with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Compassioner for Patents, P.O. Box 1450, Alexandria,

and Marks

Signature:

MAIL STOP AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

STATEMENT FILED PURSUANT TO THE DUTY OF DISCLOSURE UNDER 37 C.F.R. §§1.56, 1.97 AND 1.98

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicants request consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. §1.97

This Information Disclosure Statement has been filed more than three months after the filing date of this application and after the mailing date of the first Office action, but before the mailing date of any final action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in this application.

The fee of \$180.00 as set forth in 37 C.F.R. §1.17(p) is enclosed MBLANCO 00000001 10812653

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PART II: Information Cited

The Applicants hereby make of record in the above-identified application the information listed on the attached form PTO-1449 (modified). The order of presentation of the references should not be construed as an indication of the importance of the references.

The Applicants hereby make the following information of record in the above-identified application. The Applicants would like to bring to the Examiner's attention the following copending applications that may contain subject matter related to this application:

Serial No.	Filing Date	Inventor(s)	Atty. Docket No.
11/283,631	11/21/05	Lieber, et al.	H0498.70112US03
11/284,350	11/21/05	Lieber, et al.	H0498.70112US04
11/313,096	12/20/05	Lieber, et al.	H0498.70112US05

If the Examiner has not had the benefit of review of the file history of these applications, then the Examiner is kindly asked to contact the undersigned, who will provide a copy of same.

PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

- 1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
- 2. The enclosed form PTO-1449 be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;
- 3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicants make no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the Applicants make no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

By submitting this Information Disclosure Statement, the Applicants make no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicants, the Examiner is urged to form his own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,

By:

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Atty. Docket No.: H0498.70112US01

FORM PTO-1449/A and B (Modified)			APPLICATION N	O.: 10/812653	ATTY. DOCKET NO.: H0498.70112US01			
` ,				FILING DATE:	March 29, 2004	CONFIRMATION NO.: 3416		
FORM PTO-1449/A and B (Modified) INFORMATION DISCLOSURE STATEMENT BY APPLICANT Sheet 1 of 2		APPLICANT:	APPLICANT: Charles M. Lieber, et al.					
			_	GROUP ART UN	IT: 2814	EXAMINER:	Howard Weiss	
Sheet	1	of	2	GROOF ART ON	11. 2017	DATUMINER.	11011414 11 0155	

U.S. PATENT DOCUMENTS

Examiner's Cite Initials	U.S. Patent Docu	ıment	Name of Patentee or Applicant of Cited	Date of Publication or of issue of Cited Document	
	Number	Kind Code	Document		
		2,923,920		Fitch	02-02-1960
A	JG 1 0 2	3,873,359		Lando	03-25-1975
B	1 0 2	3,873,360		Lando	03-25-1975
(A)	E	3,900,614		Lando	08-19-1975
-	PADEMA	5,352,651		Debe, et al.	10-04-1994
		5,948,470		Harrison, et al.	09-07-1999
•		6,536,106		Jackson, et al.	03-25-2003

FOREIGN PATENT DOCUMENTS

Examiner's Cite Initials No.	Foreign Patent Document			Name of Patentee or Applicant of Cited	Date of Publication of	Translation	
		Office/ Country	Number	Kind Code	Document (not necessary)	Cited Document MM-DD-YYYY	(Y/N)
		wo	96/29629	A2	President and Fellows of Harvard College	09-26-1996	
		wo	97/34025	A1	President and Fellows of Harvard College	09-18-1997	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Cit Initials No		Include name of the author (in CAPITAL LETTERS) title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, relevant page(s), volume-issue number(s), publisher, city and/or country where published.		
		COLLINS, et al., "Nanotube Nanodevice," Science 278 (1997) pp. 100-103.		
		DUME, "Sizing up nanotubes," <i>PhysicsWeb</i> , June 28, 2006 (web article).		
		KIM, et al., "Electronic Density of States of Atomically-Resolved Single-Walled Carbon Nanotubes: Van Hove Singularities and End States" <i>Phys. Rev. Lett.</i> 82, 1225-1228 (1999).		
		KONG, et al., "Synthesis of Individual Single-Walled Carbon Nanotubes on Patterned Silicon Wafers", <i>Nature</i> 395, 878-881 (1998).		
		KONG, et al., "Chemical Vapor Deposition of Methane for Single-Walled Carbon Nanotubes" <i>Chem. Phys. Lett.</i> 292, 567-574 (1998).		
		LIU, et al, in "Controlled Deposition of Individual Single-Walled Carbon Nanotubes on Chemically Functionalized Templates," <i>Chem. Phys. Lett.</i> 303 (1999) 125-129.		
-		TANS, et al., "Room-temperature transistor based on a single carbon nanotube," <i>Nature</i> 393 (1998) pp. 49-52.		
		WONG, et al., "Covalently Functionalized Nanotubes as Nanometer Probes for Chemistry and Biology" <i>Nature</i> 394, 52-55 (1998).		
		WONG, et al., "Covalently-Functionalized Single-Walled Carbon Nanotube Probe Tips for Chemical Force Microscopy" J. Am. Chem. Soc. 120, 8557-8558 (1998).		
		YAMAMOTO, et al., "Orientation and Purification of Carbon Nanotubes using AC Electrophoresis," J. Phys. D.: Appl. Phys. 31(8), L34-L36 (1998).		

APPLICATION NO.: 10/812653 ATTY. DOCKET NO.: H0498.70112US01 FORM PTO-1449/A and B (Modified) March 29, 2004 CONFIRMATION NO.: 3416 FILING DATE: INFORMATION DISCLOSURE Charles M. Lieber, et al. APPLICANT: STATEMENT BY APPLICANT **EXAMINER:** Howard Weiss 2814 GROUP ART UNIT: 2 2 of Sheet Office Action dated 04/07/2006 from U.S. Patent Application Serial No. 10/973,665 Office Action dated 05/23/2006 from U.S. Patent Application Serial No. 11/283,631 Office Action dated 04/03/2006 from U.S. Patent Application Serial No. 11/313,096 DATE CONSIDERED: **EXAMINER:**

#EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

*a copy of this reference is not provided as it was previously cited by or submitted to the office in prior applications, Serial No. ____, filed _____, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE - The Office hereby waives the requirement under 37 CFR 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC 371 after June 30, 2003. See 37 CFR 1.491(b). For all patent applications filed on or before June 30, 2003, copies of cited U.S. patents and patent application publications are still required unless an eIDS is filed. Copies of all other patent(s), publication(s), or other information listed must still be provided, even if it was previously submitted to, or cited by, the U.S. Patent Office in an earlier application, unless the earlier application is identified by the IDS and is relied upon for an earlier filing date under 35 U.S.C. §120, and the copy was provided in the earlier application.]